RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _09/855,340C_

Source: _1Fw/16_

Date Processed by STIC: _12/6/06_

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: _O9/855,340C_　　　　CRF Edit Date: _12/6/06_
　　　　　　　　　　　　　　　　　　　Edited by: _AL_

____ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

_✓_ Corrected the SEQ ID NO. Sequence numbers edited were:

____19_____

_✓_ (Inserted) or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

____19_____

____ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

____ Inserted mandatory headings/numeric identifiers, specifically:

_____

____ Moved responses to same line as heading/numeric identifier, specifically:

_____

_✓_ Other: _deleted software information after Seq. 18_
_____
_____

RAW SEQUENCE LISTING   DATE: 12/06/2006
PATENT APPLICATION: US/09/855,340C   TIME: 17:06:00

        Input Set : A:\PTO.txt
        Output Set: N:\CRF4\12062006\I855340C.raw

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 3 <110> APPLICANT: Hosted, Jr., Thomas J.
 4        Horan, Ann C.
 6 <120> TITLE OF INVENTION: Isolation of Micromonospora carbonacea var africana
 7        pMLP1 integrase and use of integrating function for
 8        site-specific integration into Micromonospora
 9        halophitica and Micromonospora carbonacea chromosome
11 <130> FILE REFERENCE: IN01164K US
13 <140> CURRENT APPLICATION NUMBER: 09/855,340C
14 <141> CURRENT FILING DATE: 2001-05-15
16 <150> PRIOR APPLICATION NUMBER: 60/204,670
17 <151> PRIOR FILING DATE: 2000-05-17
19 <160> NUMBER OF SEQ ID NOS: 19
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 1179
25 <212> TYPE: DNA
26 <213> ORGANISM: Micromonospora carbonacea
28 <400> SEQUENCE: 1
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30 gtcaccattc agaccggtta tccgacgaag accagcgcca agaatgcgat ggtgcagttc 120
31 cgtgcggagc agttgcaggg caacgcgctc atgccgcgcg gcggtcagat taccctcgcc 180
32 gatttcgtgg gggagtggtg gccgagctac gaaaagacgc tgaaaccgac cgccgtgaac 240
33 tcggagggca accggatccg caaccacctc ctgcccatac tcggccatct caccccttgac 300
34 gagctggacg ggcaggtcac ccagcagtgg gtcaacgacc tggaggccgg cgtcggcccg 360
35 tggccggagt ccacgcgggg tcgtcggaag ccgctggcag cgaagacgat cagcaactgc 420
36 cacggcctgc tgcacacgat ctgcggcgcg gcgatcgcgg cgaaacggat caggctcaac 480
37 ccgtgctctt cgacgatgct gccccggcgc gagccgaaag agatgaagtt cctgagcgac 540
38 ccggagatcg gtcggcttat cacggcgctt ccgccgcact ggcgaccgct cgtcatgctg 600
39 ctggtggcga ccggtctgag gtggggtgag gcgatcggcc tgcgcgccgg ccgggtcgac 660
40 ctgctcgccg cgcggccccg gctgaccgtc gtcgagcagc tccaggagct ggccagcacg 720
41 ggagagctcg tcttccagtc gccgaagacc gcgaagggcc ggcgcacggt cagtttcacc 780
42 acgaaagtcg ctctactgct tacgccactc atcgccggaa agaaaagtga cgaggtcgtg 840
43 ttcaccgcgc cgaaaggcgg gatggtaagg acgcgcaatt ccggcggat ctgggtcaag 900
44 gcgtgcgagg aagccgggct tccgggctta cgcattcacg atctgcggca cactcacgcg 960
45 gcgatcctga tttctgccgg gcgtccgctg tcggcgatct cccgccgcct cggtcactcg 1020
46 tcgatcgcgg tcacggatct gctgtacggg cacctgcgtg aggaggtcga cgaggggatc 1080
47 ctcgcggcga tcgaggaggc gatggccggc gtccgggctg aggacctgga ggcggaactc 1140
48 gacgaggagc tgacggacgt gttggccgac gcagcatga 1179
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52 <211> LENGTH: 426
53 <212> TYPE: DNA
54 <213> ORGANISM: Micromonospora carbonacea
56 <400> SEQUENCE: 2
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 57 atgcgcaaca caccggggct ggggcgcggc acatgggccg catacgtcct caccgcccgc 60
 58 gagcgcgccg gactgaccaa gagcgagttg gccaggcgca tccagaagga ccgggccacc 120
 59 gtcggccggt gggaggacgg caagaaccgg cccgacgacg cggacctcgt tgcccgcgtc 180
 60 gcccaggtgc tcggcctcga cctcgacgaa gccctcgccg ccgcaggtct gcgccccggc 240
 61 gtcaccccgc cagcgacccc aaccatggac ctggacgagg aaatcgagct ggtccgcacc 300
 62 gaccccaagc tggacgagga catgaagcgg cgcatcatcg ccctaatcct ggagcgccgt 360
 63 gagcgcgaca aggcggcggc gatcgaggaa accaagcggc tcatcgacct gttccgccgg 420
 64 agctga                                                         426
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 70 <213> ORGANISM: Micromonospora carbonacea
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 77 <211> LENGTH: 241
 78 <212> TYPE: DNA
 79 <213> ORGANISM: Micromonospora carbonacea
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 82 tattagtccg cacgccgccc ggccccgccg gagcggagcg catggtggct gtagctcagt 60
 83 tggcagagca ccgggttgtg gtcccggttg tcgtgggttc aattcccatc agtcacccgt 120
 84 acacgaaggc cccctccact cggagggggc cttcggcgtt cctgagggtt cgcggtcagg 180
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 90 <211> LENGTH: 243
 91 <212> TYPE: DNA
 92 <213> ORGANISM: Micromonospora carbonacea
 94 <400> SEQUENCE: 5
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 96 tggtggctgt agctcagttg gcagagcacc gggttgtggt cccggttgtc gtgggttcaa 120
 97 ttcccatcag tcacccggca agtggatcta ctccacagca gatcaggccc cctccgaaga 180
 98 gggggcctga tgcgtcatag gggacaggta ggggaactca accccggct ccttgctcgc 240
 99 gtc                                                            243
102 <210> SEQ ID NO: 6
103 <211> LENGTH: 247
104 <212> TYPE: DNA
105 <213> ORGANISM: Micromonospora carbonacea
107 <400> SEQUENCE: 6
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109 gtcaggtggc ctgttgaccc cctgaccagg gccccggtac gggttcaatt cccatcagtc 120
110 acccgtacac gaaggccccc tccactcgga ggggccttc ggcgttcctg agggttcgcg 180
111 gtcaggcggt cggctcggcg ctgggggact cggccccgtc ggcgggagtg gcctcggcgt 240
112 ccgggga                                                        247
115 <210> SEQ ID NO: 7
116 <211> LENGTH: 255
117 <212> TYPE: DNA
118 <213> ORGANISM: Micromonospora halophytica
120 <400> SEQUENCE: 7
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121 tttctccgca cccgcccggg gcgttcgacc gggtgcggcg gcatggtggc tgtagctcag 60
122 ttggcagagc accgggttgt ggtcccggtt gtcgtgggtt caattcccat cagtcacccc 120
123 aggtaagacc caggtcaggg ccggttctca ccggccctga cgcattttca ggggcatggt 180
124 ggggcgcta ccggggggtgg ggtgtctcac cgcgagccag catctcgatc aggcgatcga 240
125 gccggcgctg ccggg                                                  255
128 <210> SEQ ID NO: 8
129 <211> LENGTH: 315
130 <212> TYPE: DNA
131 <213> ORGANISM: Micromonospora halophytica
133 <400> SEQUENCE: 8
134 tttctccgca cccgcccggg gcgttcgacc gggtgcggcg gcatggtggc tgtagctcag 60
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136 gcaagtggat ctactccaca gcagatcagg cccctccga agaggggcc tgatgcgtca 180
137 taggggacag gtaggggaac tcaaccccg gctccttgct cgcgtcgggt catgccgtcc 240
138 gcgtacccct ccgcgtacct ggccctctcc cgttcctcga tctcggcggc gagctgatcg 300
139 cgcaggtgcg cctcc                                                  315
142 <210> SEQ ID NO: 9
143 <211> LENGTH: 260
144 <212> TYPE: DNA
145 <213> ORGANISM: Micromonospora halophytica
147 <400> SEQUENCE: 9
148 taggggaatc cactccggag acgcccggag caatccggag catgacggag caaccagcag 60
149 gtcaggtggc ctgttgaccc cctgaccagg gccccggtac gggttcaatt cccatcagtc 120
150 accccaggta agacccaggt cagggccggt tctcaccggc cctgacgcat tttcaggggc 180
151 atggtggggg cgctaccggg ggtggggtgt ctcaccgcga gccagcatct cgatcaggcg 240
152 atcgagccgg cgctgccggg                                            260
154 <210> SEQ ID NO: 10
156 <211> LENGTH: 209
158 <212> TYPE: DNA
160 <213> ORGANISM: artificial sequence
164 <220> FEATURE:
166 <223> OTHER INFORMATION: pMLP1 attP region
168 <400> SEQUENCE: 10
169 taggggaatc cactccggag acgcccggag caatccggag catgacggag caaccagcag   60
171 gtcaggtggc ctgttgaccc cctgaccagg gccccggtac gggttcaatt cccatcagtc   120
173 acccggcaag tggatctact ccacagcaga tcaggccccc tccgaagagg gggcctgatg   180
175 cgtcataggg gacaggtagg ggaactcaa                                    209
178 <210> SEQ ID NO: 11
180 <211> LENGTH: 19
182 <212> TYPE: DNA
184 <213> ORGANISM: artificial sequence
188 <220> FEATURE:
190 <223> OTHER INFORMATION: primer PR144
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193 tgcttcgacg ccatcargg                                              19
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202 <213> ORGANISM: artificial sequence
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     208 <223> OTHER INFORMATION: primer PR145
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     216 <223> OTHER INFORMATION: n is inosine (I)
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     237 <400> SEQUENCE: 13
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     243 <211> LENGTH: 21
     245 <212> TYPE: DNA
     247 <213> ORGANISM: artificial sequence
     251 <220> FEATURE:
     253 <223> OTHER INFORMATION: primer PDH505
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     261 <211> LENGTH: 21
     263 <212> TYPE: PRT
     265 <213> ORGANISM: artificial sequence
     269 <220> FEATURE:
     271 <223> OTHER INFORMATION: amino acid sequence of open reading frame indicated in
figures 4b
     272         and 4d
     274 <400> SEQUENCE: 15
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     277 1               5                  10                 15
     280 Ala Glu Pro Thr Ala
     281               20
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     288 <212> TYPE: PRT
     290 <213> ORGANISM: artificial sequence
     294 <220> FEATURE:
     296 <223> OTHER INFORMATION: amino acid sequence of open reading frame indicated in
figures 5b
     297         and 5d
     299 <400> SEQUENCE: 16
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     302 1               5                  10                 15
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313 <213> ORGANISM: Micromonospora carbonacea
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326 <211> LENGTH: 21
327 <212> TYPE: PRT
328 <213> ORGANISM: Micromonospora halophytica
330 <400> SEQUENCE: 18
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340 <211> LENGTH: 21
341 <212> TYPE: DNA
342 <213> ORGANISM: Artificial Sequence
344 <220> FEATURE:
345 <223> OTHER INFORMATION: primer PDH502
347 <400> SEQUENCE: 19
348 ttgttggtcc ggcccgcaac g                 21
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 12/06/2006
PATENT APPLICATION: **US/09/855,340C**   TIME: 17:06:01

Input Set : **A:\PTO.txt**
Output Set: **N:\CRF4\12062006\I855340C.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:12; N Pos. 7

VERIFICATION SUMMARY   DATE: 12/06/2006
PATENT APPLICATION: **US/09/855,340C**   TIME: 17:06:01

Input Set : **A:\PTO.txt**
Output Set: **N:\CRF4\12062006\I855340C.raw**

L:221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0

Raw Sequence Listing before editing (for reference only)

IFW16

RAW SEQUENCE LISTING   DATE: 12/06/2006
PATENT APPLICATION: **US/09/855,340C**   TIME: 08:33:26

Input Set : **A:\seqlist.txt**
Output Set: **N:\CRF4\12062006\I855340C.raw**

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 3 <110> APPLICANT: Hosted, Jr., Thomas J.
 4         Horan, Ann C.
 6 <120> TITLE OF INVENTION: Isolation of Micromonospora carbonacea var africana
 7         pMLP1 integrase and use of integrating function for
 8         site-specific integration into Micromonospora
 9         halophitica and Micromonospora carbonacea chromosome
11 <130> FILE REFERENCE: IN01164K US
13 <140> CURRENT APPLICATION NUMBER: 09/855,340C
14 <141> CURRENT FILING DATE: 2001-05-15
16 <150> PRIOR APPLICATION NUMBER: 60/204,670
17 <151> PRIOR FILING DATE: 2000-05-17
19 <160> NUMBER OF SEQ ID NOS: 19
21 <170> SOFTWARE: PatentIn Ver. 2.1
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Does Not Comply Corrected Diskette Needed

ERRORED SEQUENCES

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     347 <213> ORGANISM: Artificial Sequence
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21 ⟵ insert

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Thr Pro His Pro Arg
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<160> 19

<170>   PatentIn version 3.3

delete